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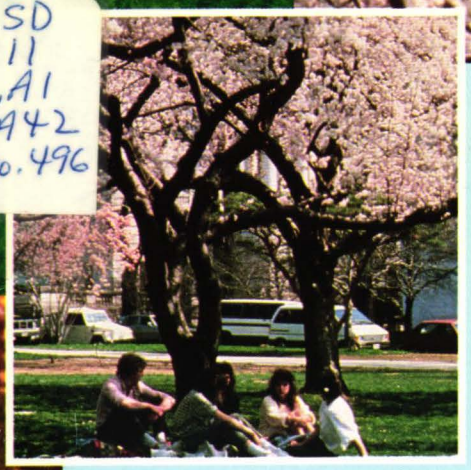
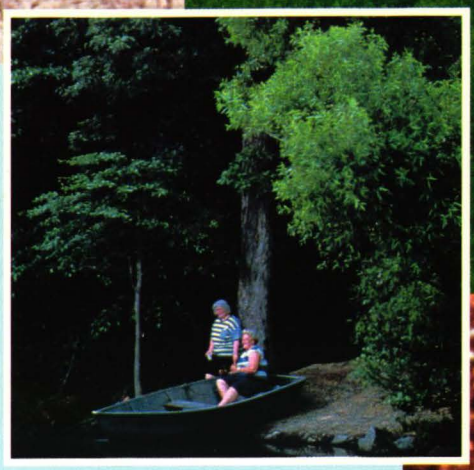




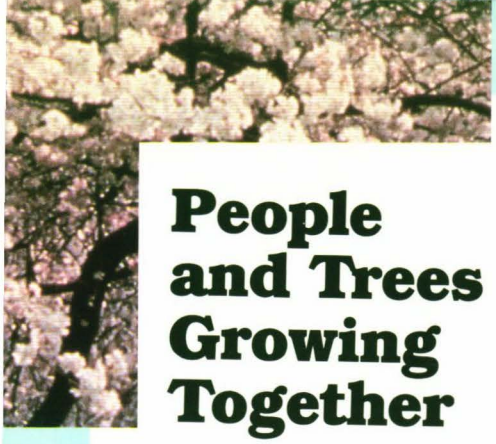
# PEOPLE AND TREES GROWING TOGETHER

## America The Beautiful

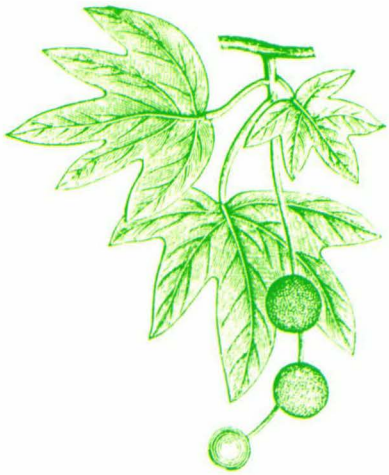
NATIONAL TREE PROGRAM

United States
Department of
Agriculture

Forest Service
FS-496

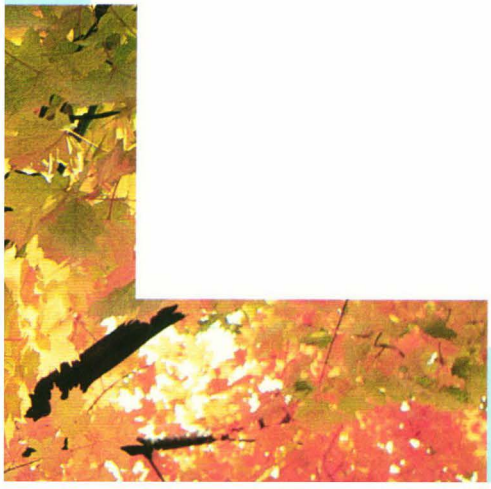


# People and Trees Growing Together



America the Beautiful is aimed at planting and improving trees in every rural area, town, and city across the country. This national program is much more than simply planting and caring for trees. It involves taking steps to improve the quality of our lives . . . helping the economy and investing in the future . . . working together to make a difference in our environment. America the Beautiful is all these things and more—it is **people and trees growing together!**

What would the ideal America be like? Would you envision green and tranquil city parks, tree-graced avenues and highways, and lush expanses of forests and rich farmlands in a carefully tuned balance with structures built by people? Would you imagine crystal clear air, sparkling water, and a healthy, abundant variety of wildlife? Do you see yourself and others living happy, active, caring, and comfortable lives? If that is what you hope for the future, then you share the vision of America the Beautiful, and you can help make that vision come true.



# People and Trees Growing Together

## It's a natural equation: healthy trees = a healthy community.

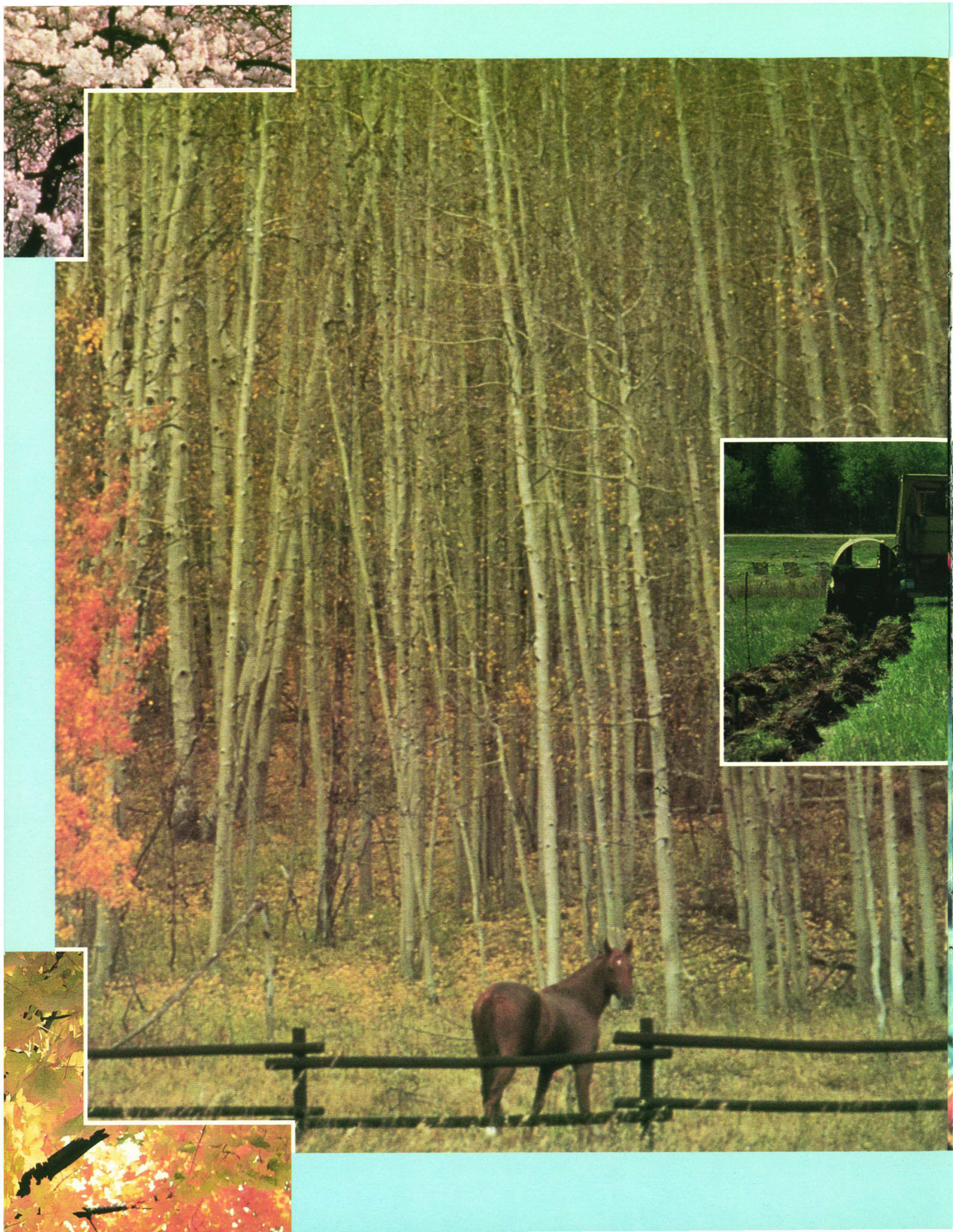
Here is what America the Beautiful will accomplish:

- Plant, care for, and improve millions of trees per year over the next 10 years.
- Offset the buildup of harmful carbon dioxide ($CO_2$) emissions in the atmosphere.
- Provide numerous benefits for the environment and the economy.
- Teach people about trees and the natural environment.
- Show people they can work together to improve the quality of the environment and their lives and that **each effort counts!**

Here is what you will gain:

- A more beautiful and comfortable environment.
- A healthier, more pleasant lifestyle.
- Practical knowledge and know-how about trees.
- New friends who share your interests and concerns.
- Pride in your accomplishments and visible proof that your actions make a difference.

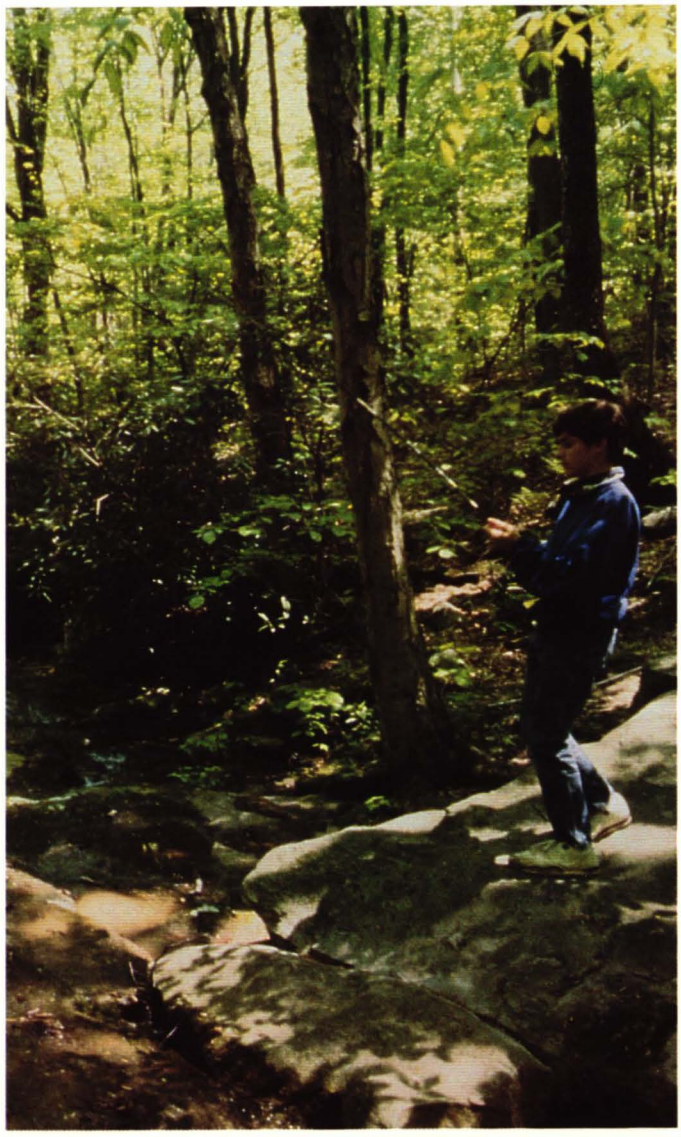
**Wherever we live, trees make our lives better.**



# What a Difference A Tree Makes!

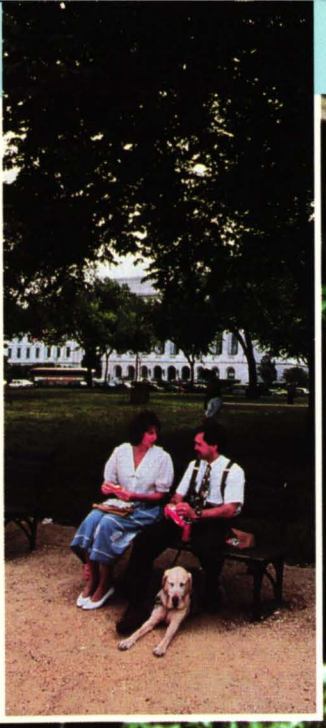
## In the Country

*Where farming is no longer profitable, the planting of trees can improve the quality and beauty of the land.*



*Trees are vital along rivers, streams, and other ecologically sensitive areas.*

CURB LANE
BUSES AND RIGHT TURN ONLY
7-9 AM
4-6 PM



# What a Difference A Tree Makes!

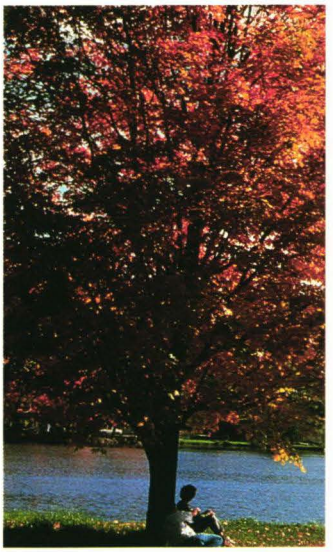
## In the City

*Planting trees in our cities can reverse the trend of deforestation and improve air quality and climate control.*

*Volunteers are an essential part of America the Beautiful.*

# What a Difference A Tree Makes!

## In the Suburbs



*Trees, shrubs, and ground cover work together to create a beautiful and healthy environment.*

# Tree of Life

## Our Surroundings

### Trees Clean the Air

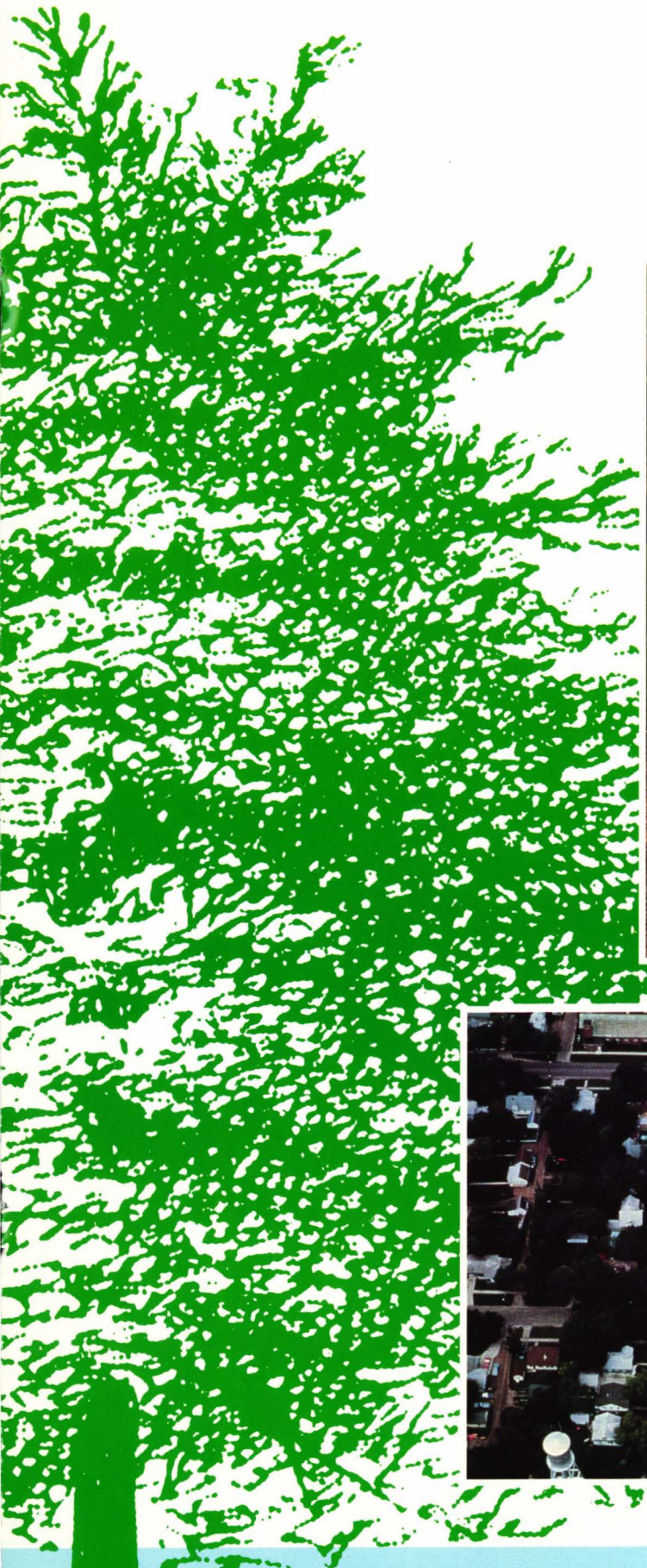
- Trap and hold dangerous pollutants.
- Offset the buildup of $CO_2$ in the air—fighting the "greenhouse effect" that could lead to global warming.
- Produce oxygen—an acre of trees supplies enough oxygen each day for 18 people.
- Reduce the need for polluting forms of energy.

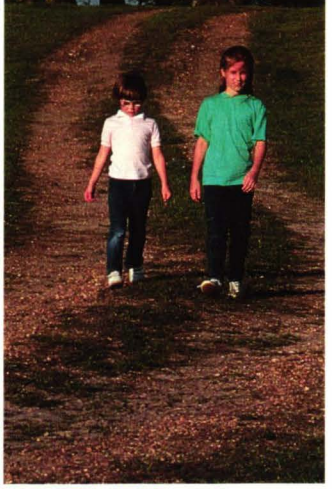
### Trees Improve the Climate

- Provide shade and release moisture—easing the buildup of heat in urban "heat islands."
- Increase humidity in dry climates.
- Protect people from the wind and cold.
- Block glare from the sun.

### Trees Conserve Resources

- Reduce water loss caused by surface runoff.
- Increase moisture in the air, so we consume less water.
- Reduce soil erosion by both wind and water.
- Lessen sediment buildup in streams.
- Increase ground-water recharge.
- Reduce the amount of harmful substances that wash into waterways.
- Shade streams, rivers, and lakes—maintaining temperature control for aquatic life.
- Provide food and shelter for a variety of wildlife.





## Trees Beautify

- Add beauty, variety, and character to our surroundings.
- Screen unsightly views.
- Soften the harsh outlines of buildings.
- Absorb and block noise.
- Define space and lend continuity to landscapes.

## Trees Connect

- Link us symbolically to past events and eras.
- Serve as a living legacy for the next generation.
- Link us to the near and distant future.

# Tree of Life

## Ourselves

### Trees Ease the Mind and Body

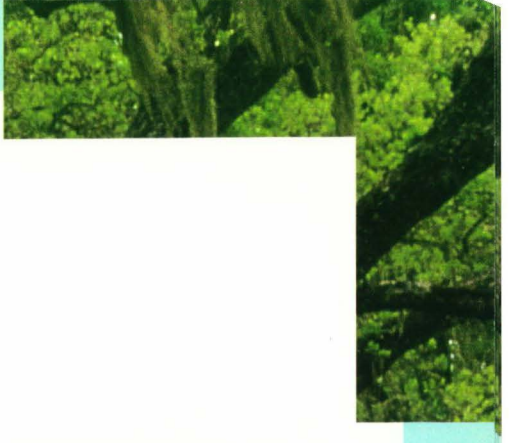
- Soothe and relax us.
- Enhance our sense of privacy and solitude.
- Encourage quicker recovery from illnesses.
- Inspire us and touch our spirit.
- Connect us to nature and our surroundings.

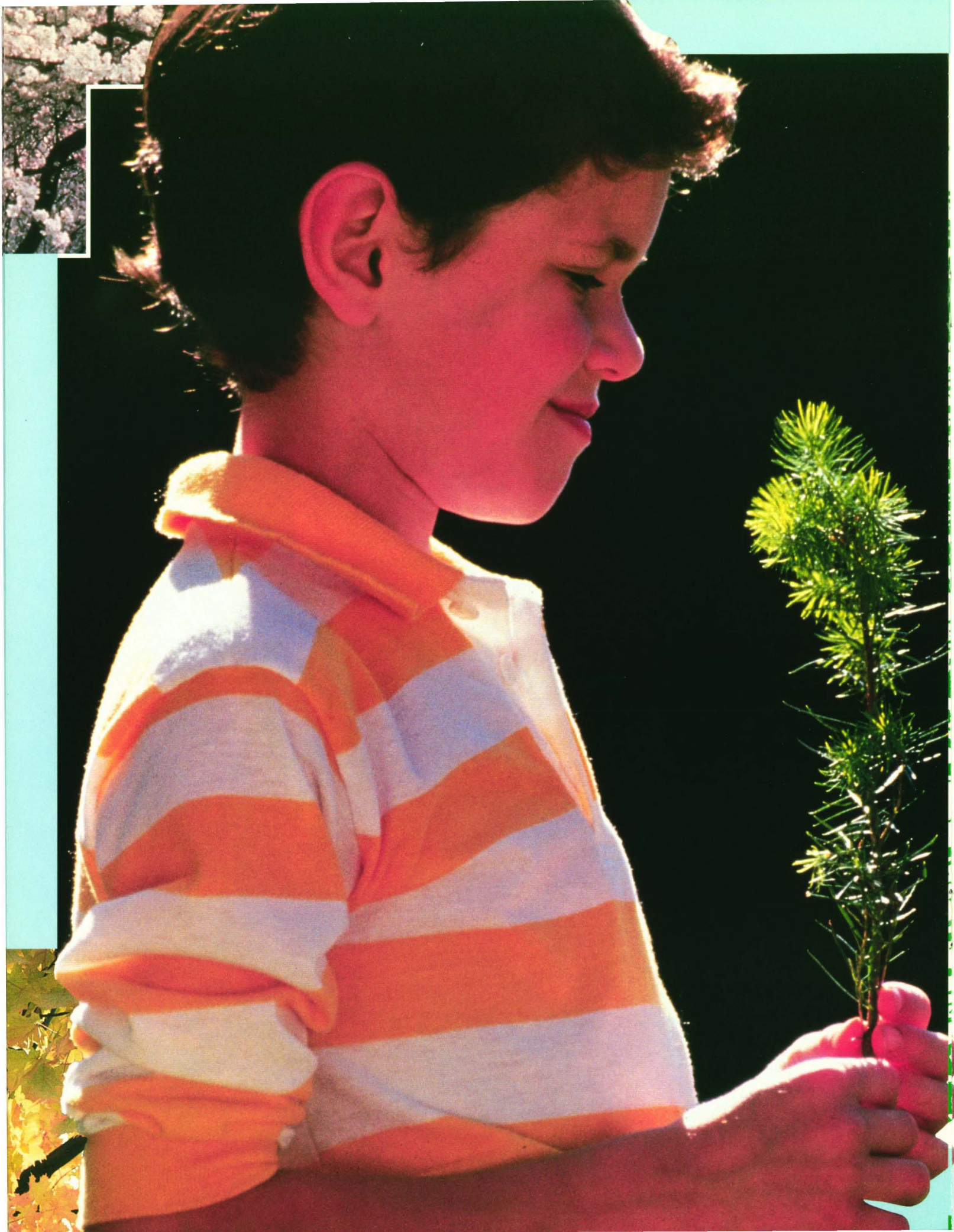
### Trees Improve the Social Climate

- Offer an attractive site to socialize and participate in recreation.
- Contribute to a sense of community pride and ownership.
- Provide a place for children to play.
- Serve as living proof that we can make a positive change in our surroundings.

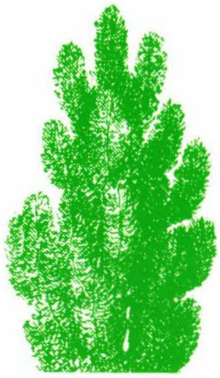
### Trees Help the Economy

- Reduce air-conditioning and heating costs—reducing national dependence on oil and natural gas.
- Increase property values—residential, commercial, and industrial.
- Attract businesses and tourists.
- Supply valuable products—lumber, paper, nuts, fruit, and so on.
- Enhance the job market.





# Do Trees Need Us?



*With trees, we have nowhere to grow but **UP**!*

Yes! Trees live longer and grow better with a helping hand. They need to be properly cared for—planted in the right place, watered, fertilized when needed, pruned, thinned, and protected from insects, injury, and disease. By properly taking care of trees, we can take full advantage of their benefits. Most of us already know a few ways to help the environment, such as buying a fuel-efficient car or taking public transportation, lowering the thermostat, and supporting recycling programs. Planting and caring for trees is another simple step that can make a profound difference in the quality of our lives. Many people can help teach how to plant and care for trees—from knowledgeable neighbors to forestry professionals, including your local Forest Service or State Forester's office, county cooperative extension agent, arborist, and nursery employee. In addition to their own expertise, these forestry professionals can provide many useful publications.

To help you get started, here are four key steps to remember:

**Understand**

**Plan**

**Plant**

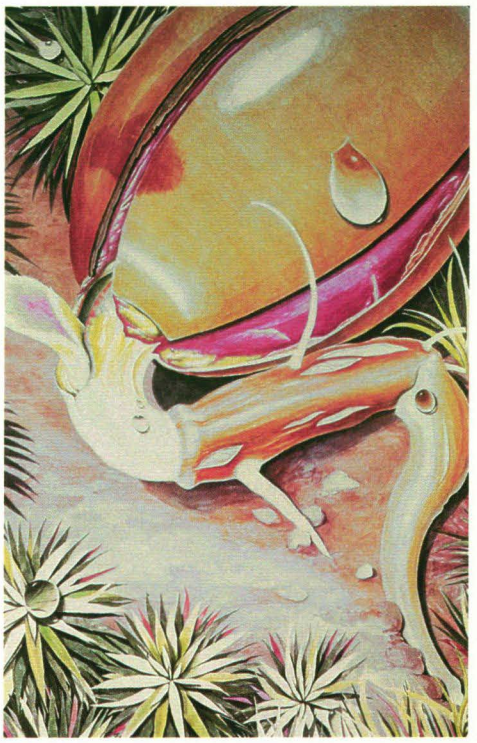
**Protect and care**

# Understand

## The Life Cycle of a Tree

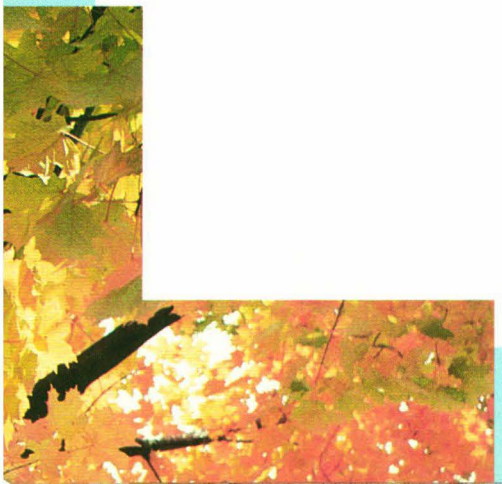
Learning about how trees live and die—and strive and thrive—is a first step in helping these beautiful and vital organisms. Like people, trees go through an ordered cycle of life, death, and rebirth, facing many stresses along the way.

***Start a New Life Cycle—Plant a Tree***



**Birth**
A tree is born when a seed germinates.

**Death**
As with all living things, trees eventually grow old and die.

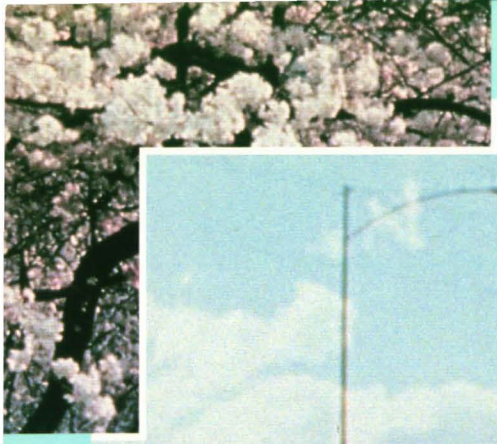


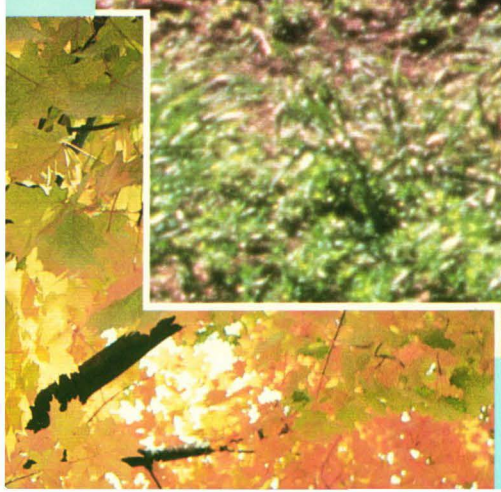
**Growth**
A tree makes its own food and grows when given sunlight, air, water and nutrients.

**Maturity**
Trees can grow and live for many years when the conditions are right.

**Recycling**
Trees are recycled back to nature or sometimes turned into products, such as lumber, paper, and firewood.

**Rebirth**
A tree is reborn and a natural resource is renewed.





# Plan

Thinking and planning ahead may be the most important step in your effort to help trees. How well you plan may determine whether or not your tree lives and thrives. Here are a few sample questions to ask before starting:

**Have I chosen the right tree?**

- Will the species grow well in this climate and soil?
- Did the seed or seedling come from my local area, giving it a better chance to survive?
- Is it the size and shape I want?

**Have I chosen the right place to plant it?**

- Is anything overhead or around it that might obstruct its growth?
- What kind of human activity takes place here?
- Are there good drainage and room for the roots to expand?

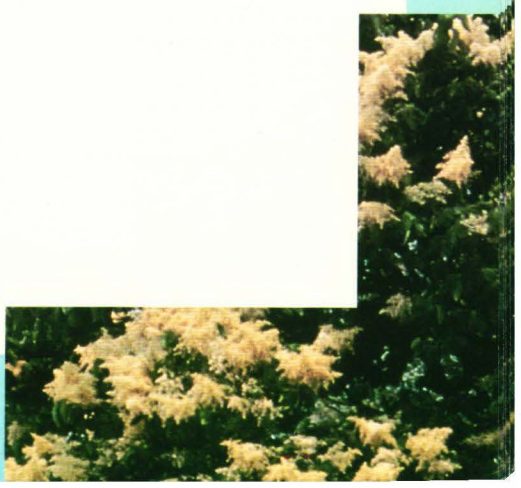
**Do I have enough resources?**

- How much money will I need?
- What materials and equipment will I use?
- How many people can I get to help?

**Do I have permission to plant here?**

- What do the city and county ordinances say about who can plant what and where?
- Will my neighbors, or whoever shares the space, agree?

For more details about what questions to ask and how to plan for planting, contact your local nursery employee or arborist or one of the professionals listed on the back cover.



# Plant

## How to Plant a Tree in Your Neighborhood

Here are a few guidelines for planting trees. For more detailed guidelines, consult a nursery employee, arborist, or one of the professionals listed on the back cover.

**1.** Choose the right spot, and then loosen and blend all the soil in an area up to five times the diameter of the root ball, 6 to 10 inches deep. In the center, dig a hole as deep as but wider than the root ball.

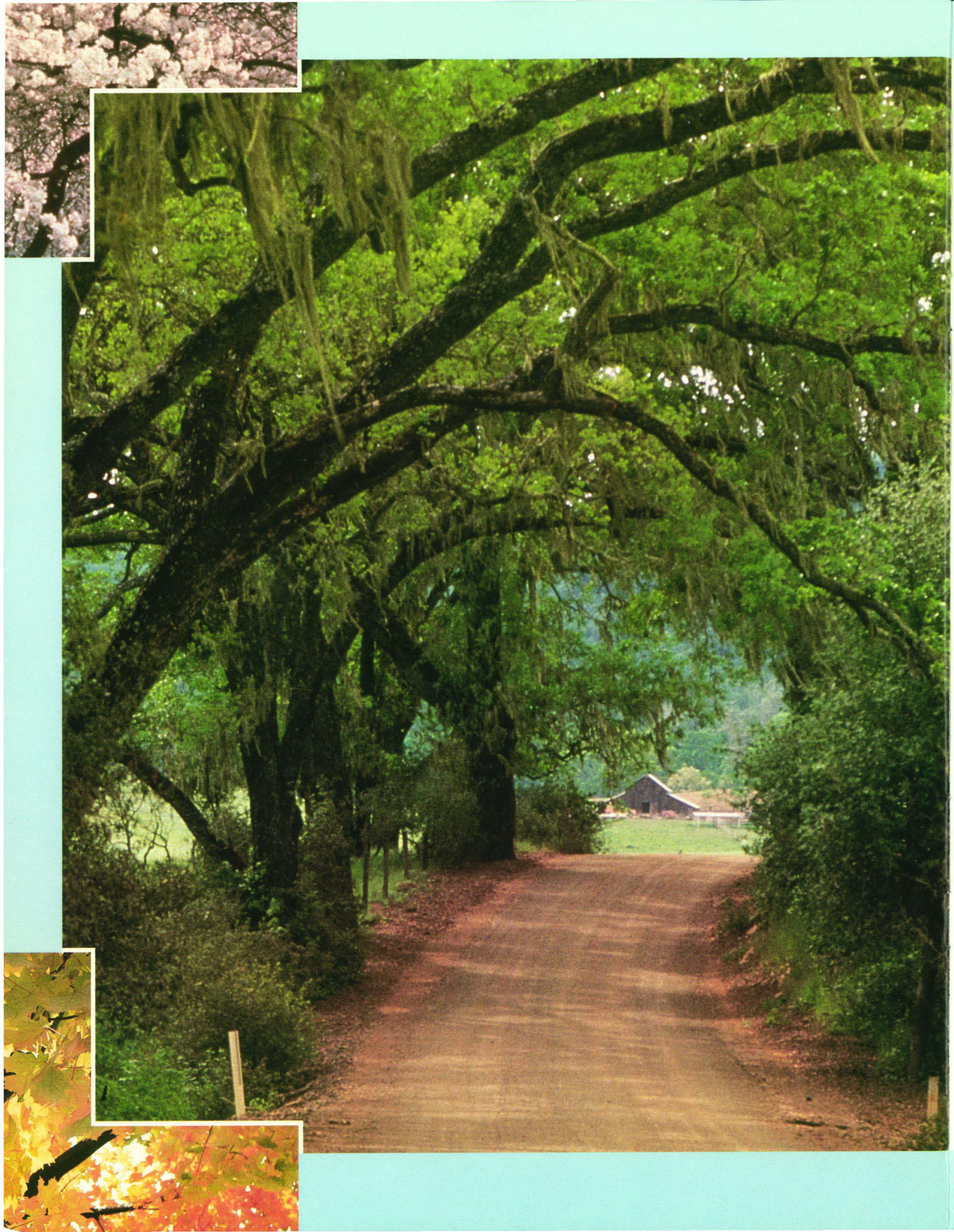
**2.** Remove the burlap or container. Place the tree in the hole on packed soil. Keep the root collar slightly above the surrounding soil.

**3.** Fill in the hole with soil.

**4.** Water the area thoroughly.

**5.** Stake the tree to keep it upright, but not tautly, so it still has room to move. Remove the stake 1 year after planting or before the second growing season.

**6.** Mulch, and mulch again, until you cover the entire area, except for 6 to 8 inches around the tree trunk. Use a 2- to 4-inch layer of bark, leaves, gravel, or other mulch. (Mulching helps conserve moisture and discourage weeds.)



# Planting Trees In the Country

If you live where deer and woodchucks outnumber people, you may face a different situation than city dwellers when planting trees. Here are just a few other important points to consider:

**1.** When planting large numbers of trees (200 or more) on smooth, open soils, consider using a tree planter. This efficient machine can plant 1,000 to 1,500 trees per hour. Call your local State Forester's office for help in locating one. (If planting on steep land or after a timber harvest, you may need to plant by hand, at a top rate of 1,000 trees per day.)

**2.** Maintaining ground cover is important for erosion control, especially in wide-open spaces. Remove grass from the planting spots, and mow it in surrounding areas to keep it from overwhelming very young trees.

**3.** If you are planting in areas such as streambanks, wetlands, and lakeshores that have a major impact on water quality, check with your State Forester or other professional about the spacing guidelines or regulations for the area.

**4.** When planting a large number of very young trees, protect the unplanted ones by keeping their sensitive, exposed roots moist at all times.

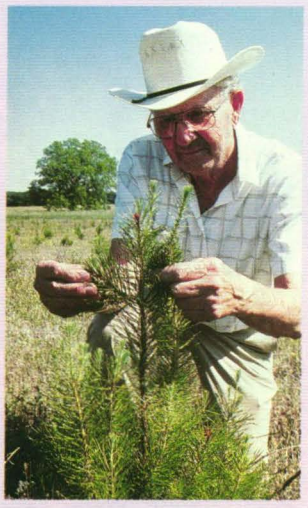
## FORESTRY PROGRAMS

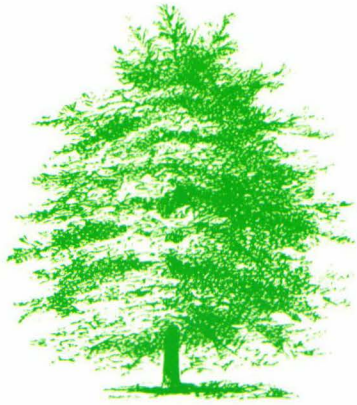
America the Beautiful draws on three established forestry programs that provide financial and technical assistance to qualified communities, groups, and landowners.

- **Urban and Community Forestry Assistance Program** offers technical assistance, education, and partnerships to communities and organizations. Under the partnerships, the Forest Service would pay a percentage of the costs for programs.

- **Forest Stewardship Program** provides technical advice on forest resource management to rural landowners.

- **Stewardship Incentive Program** offers partnerships with rural landowners who follow a management plan on their forest land. Under the partnerships, the Forest Service would pay a percentage of the costs for implementing a plan.



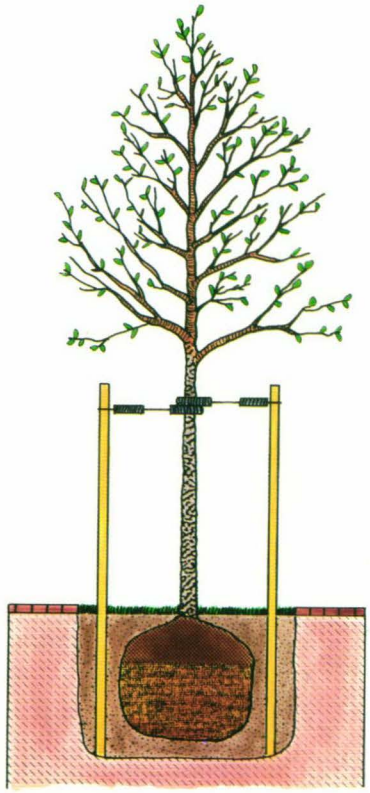


# Protect and Care

Trees are marvelously adapted to living and thriving on Earth. They tolerate storms, floods, droughts, temperature extremes, many insects and diseases, grazing, climbing, carving, trampling, and other stresses. Despite such obstacles, some trees grow to be the oldest living organism, and the largest living organism, on Earth.

But trees do have limitations. They cannot express their pain when injured. They cannot go inside when the ozone count gets too high. Of all of Earth's inhabitants, human beings are the greatest source of damage and stress to trees. People are also the most capable of learning how to make life easier and better for trees, whether they are newly planted trees or established old friends. Here are some ways people can help:

- Guard roots during the construction of nearby buildings, roads, and so forth.
- Protect against soil compaction.
- Prevent injuries.
- Fight pollution (which hurts trees, too!).
- Prune properly.
- Protect from grazing livestock.
- Water during dry spells.
- Manage woodlands for maximum growth and health.



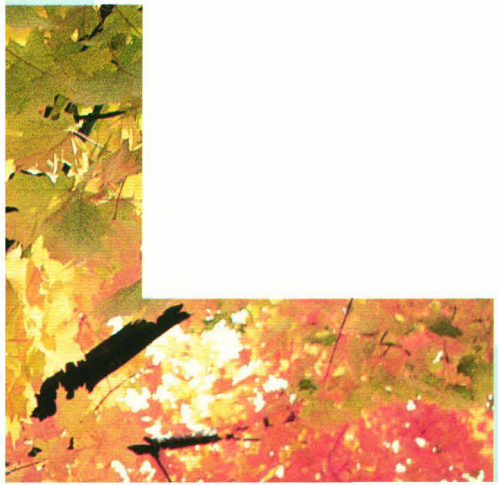
# What Your Efforts Can Mean

*"Never doubt that a small group of thoughtful, committed people can change the world. Indeed it's the only thing that ever has."*
Margaret Mead

By planting and caring for trees, you help improve your surroundings. With every tree you plant, you help reduce pollution, lower energy costs, improve the appearance of your neighborhood, and increase the value of your property. You can be extremely proud of your efforts and accomplishments. For a small investment of time and energy, you have established something of great lasting value.

Wouldn't it be wonderful if everything that pleasurable and easy had such long-term benefits? Our life **can** be better, with people and trees growing together!

The success of America the Beautiful will depend on the efforts of individuals such as you. The program and this publication will help you reach the information and people you need to successfully plant and care for trees. Forestry professionals are available to help you with technical information. We can help you find the pathways, but the journey and benefits are yours!

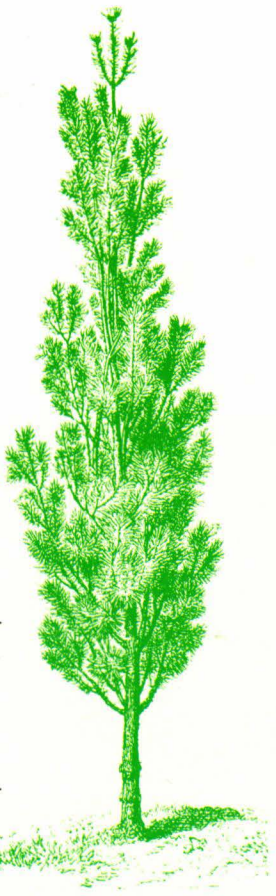


If you have questions before you start, contact:

USDA Forest Service

Your State Forester

Your Cooperative Extension Service Office



Please note that the above professionals should be looked up in your local directory or may be listed on the back cover by your nearest Forest Service unit.

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November 1991